

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/053148

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C10J3/52 C10J3/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C10J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 828 578 A (DEN BLEYKER ALFRED L) 9 May 1989 (1989-05-09) column 5, line 5 - line 10; figures	1,5-9
Y	-----	2-4, 10-13
Y	EP 0 318 071 A (SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V) 31 May 1989 (1989-05-31) cited in the application abstract; figures page 3, line 53 - line 57	2-4, 10-13
A	EP 0 374 323 A (TEXACO DEVELOPMENT CORP) 27 June 1990 (1990-06-27) column 6, line 18 - line 23 abstract; figures	1-13
	-----	-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed Invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed Invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

1 March 2005

Date of mailing of the international search report

08/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Lapeyrere, J

INTERNATIONAL SEARCH REPORTInternational Application No
PCT/EP2004/053148

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 377 930 A (TEXACO DEVELOPMENT CORP) 18 July 1990 (1990-07-18) the whole document -----	1-13
A	US 4 071 329 A (EALES DAVID FRANK) 31 January 1978 (1978-01-31) the whole document -----	1-13
A	US 4 425 254 A (SEIPENBUSCH JUERGEN ET AL) 10 January 1984 (1984-01-10) the whole document -----	1-13
A	US 5 755 838 A (MURAMATSU TADAYOSHI ET AL) 26 May 1998 (1998-05-26) abstract; figures column 11, line 12 - line 14 column 11, line 38 - line 41 column 12, line 39 -----	1-13
A	US 5 271 243 A (JELICH WERNER) 21 December 1993 (1993-12-21) the whole document -----	1-13

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/053148

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 4828578	A	09-05-1989	CN JP	1035838 A ,C 1308493 A		27-09-1989 13-12-1989
EP 0318071	A	31-05-1989	AU CN DE DE EP JP ZA	2418488 A 1032811 A ,B 3872357 D1 3872357 T2 0318071 A1 1135897 A 8807883 A		27-04-1989 10-05-1989 30-07-1992 21-01-1993 31-05-1989 29-05-1989 26-07-1989
EP 0374323	A	27-06-1990	US EP IN	4801306 A 0374323 A1 170794 A1		31-01-1989 27-06-1990 23-05-1992
EP 0377930	A	18-07-1990	US EP IN	4808197 A 0377930 A1 171038 A1		28-02-1989 18-07-1990 04-07-1992
US 4071329	A	31-01-1978	GB	1512677 A		01-06-1978
US 4425254	A	10-01-1984	DE AU AU BR CA DE EP JP JP JP PL SU US ZA	2828562 A1 529818 B2 4850379 A 7904148 A 1134146 A1 2963723 D1 0012151 A1 1179358 C 55024594 A 58011474 B 216681 A1 986300 A3 4514191 A 7903255 A		03-01-1980 23-06-1983 03-01-1980 30-12-1980 26-10-1982 04-11-1982 25-06-1980 30-11-1983 21-02-1980 03-03-1983 19-05-1980 30-12-1982 30-04-1985 25-03-1981
US 5755838	A	26-05-1998	JP JP CN	2544584 B2 7278573 A 1117074 A ,C		16-10-1996 24-10-1995 21-02-1996
US 5271243	A	21-12-1993	NONE			